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Tara Chand Singhal
P.O. Box 5075
Torrence, CA 90510

| EXAMINER | |
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| MONFELDT, SARAH M | |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/891,913 | SINGHAL, TARA CHAND | |
| | Examiner | Art Unit | |
| | SARAH M. MONFELDT | 3684 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *20 July 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *106-124* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *106-124* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *15 April 2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

## *DETAILED ACTION*
### *Status of Claims*

1. This action is in reply to the Amendment/Response filed on 20 July 2009.
2. Claims 106-107, 109-114, 117, 122-124 have been amended.
3. Claims 106-124 are currently pending and have been examined.

### *Claim Objections*

4. The claim objection set forth in the previous Office Action has been withdrawn in view of Applicants amendments and comments.

### *Claim Rejections - 35 USC § 112, first paragraph*

5. The 112, first and second paragraph rejections set forth in the previous Office Action has been withdrawn in view of Applicants amendment and comments.

### *Claim Rejections - 35 USC § 103*

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 106-108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rose et al. (US 5770843) in view of Campisano (US 6227447), further in view of Duyck (US 5557087) and Low et al. (US 5420926).

**Claim 106 –**

As per claim 106, Rose disclose *a method of protecting from theft and misuse bankcard data from merchant computer systems and securely selecting any one of a plurality of bankcards of a customer at a merchant point of sale interface for a payment transaction to a merchant* having the limitations of:

- *enabling selecting a debit card transaction requiring entry of a PIN in a merchant point of sale (POS) interface, enabling entering of (i) customer identifier, without customer identity data, by a payment card that encodes the customer identifier and (ii) a bankcard specific identification number (CPIN) in the merchant point of sale (POS) interface; (see at least col. 2, ll. 1-3, 14-22, 24-27; col. 3, ll. 46-55, col. 4, ll. 16-40, of Rose)*
- *interfacing by the adapted prior art gateway with a payment system, and sending to the payment card system the customer identifier and the CPIN; (see at least col. 2, ll. 1-3, 14-22, 24-27; col. 3, ll. 46-55, col. 4, ll. 16-40, of Rose)*
- *having stored customer bankcard data in the payment card system, wherein each bankcard is identified with a separate CPIN, identifying a particular bankcard data of the customer and verifying the customer by the bankcard specific CPIN in the payment card system; (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*

Rose et al. do not explicitly disclose:

- *enabling sending the customer identifier and the CPIN to an adapted prior art merchant gateway, along with the payment transaction data that includes a merchant identifier and a payment amount;*

- *returning to the adapted prior art merchant gateway the bankcard data corresponding to the customer identifier and the CPIN from the payment card system;*
- *assembling by the adapted prior art merchant gateway, a payment transaction record to include the bankcard data from the payment card system and the payment transaction data, and by submitting the payment transaction record to a bankcard authorization network,*
- *wherein the method does not transfer bankcard identity to the merchant computer systems.*

Rose in view of Campisano teach *enabling sending the customer identifier and the CPIN to an adapted prior art merchant gateway, along with the payment transaction data*; *returning to the adapted prior art merchant gateway the bankcard data corresponding to the customer identifier and the CPIN from the payment card system*; *assembling by the adapted prior art merchant gateway, the payment transaction record to include the bankcard data from the payment card system and the payment transaction data, and by submitting a payment transaction record to a bankcard authorization network* (see at least col. 3, l. 26 through col. 4, l. 61 of Rose; *see at least Fig. 1, col. 2, ll. 31-37;* col. 2, l. 66 through col. 3, l. 10 of Campisano). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include a verification process and subsequent charging of the credit card as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the verification process is similar to that used to verify original credit card numbers and expiration dates and once the number has been verified, the merchant processes the transaction and the credit card is charged, completing the transaction (see at least col. 2, l. 66 through col. 3, l. 10 of Campisano).

Duyck teach *the payment transaction data that includes a merchant identifier and payment amount* (see at least Figs. 2-3 and col. 3, ll. 33-52). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose in view of Campisano to include transaction amount and unique merchant code as taught by Duyck. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in view of Campisano in this way since the unique merchant code links the transaction to a particular merchant (see at least col. 3, ll. 33-52 of Duyck).

Low et al. teach *wherein the method does not transfer bankcard identity to the merchant computer systems* (see at least col. 3, ll. 9-11; 18-20, 21-29, 33-37). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include bank Bp which knows the customer only by the pseudonym P and transfers funds from account Bp to the stores account Bs as taught by Low et al. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the protocols ensure the anonymity is maintained even if parties other than the purchaser collude with each other to obtain information about the customer (see at least col. 2, ll. 13-17 of Low et al.).

**Claim 107 –**

Rose in view of Campisano, Duyck and Low et al. teach the method of claim 106 as described above. Rose et al. further explicitly disclose:

- *encoding the customer identifier without customer identity data on the payment card with an algorithm and decoding the customer identifier with the algorithm in the payment card system to get the customer identifier. identifier (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*

The Examiner notes that Rose does not specifically state “algorithm in the payment card."

However, Rose does disclose:

The card bears a machine readable code, which is transmitted to a database at a remote location. The database locates a record associated with the code, which contains one or more account numbers. (see Abstract)

The code contained within the magnetic stripe is actually a set of signals. This set of signals when delivered to the card reader and thence to database management software cause the software to fetch the account numbers and PINs which are associated with the code. (see col. 4, ll. 26-31)

Thus, the code acts as a key to unlock and release the account numbers and the PINs. In principle, the code is no different than a key which unlocks a strongbox which contains the database in a paper format. (see col. 4, ll. 32-36)

Further, the code should not be viewed as or confused with numbers or other alphanumeric characters. The code contained in the magnetic strip is a physical entity which includes physical actions when acted upon by a physical device such as a card reader. (see col. 4, ll. 37-41)

Representing the code as a string of numbers merely presents the code in human-understandable form, which is necessary for a human to read the code because a human cannot directly read the signals on the magnetic stripe. (see col. 4, ll. 42-44)

“Software” mush exist in a form which is readable by a microprocessor, and readable at speeds at which the microprocessor operates. (see col. 4, ll. 56-58)

Even though Rose does not explicitly state "algorithm", Rose teaches a code contained in the magnetic stripe that is transmitted to the remote database management software, causing the software to fetch account numbers and PINs which are associated with the code. One of ordinary skill in the art would have been motivated to include the embedded code, remote database with associated software since the associated code and software fetch account numbers and PINs which are associated with that code embedded in the magnetic stripe of the card.

**Claim 108 –**

Rose in view of Campisano, Duyck and Low et al. teach the method of claim 106 as described above. Rose et al. further disclose *a method* having the limitations of:

- *delivering the payment card to the customer; (see at least col. 2, ll. 1-3, 14-22, 24-27 of Rose)*

Rose does not explicitly disclose:

- *enabling entering the bankcard data and self-selecting the CPIN for each of the bankcards of the customer in the payment card system.*

Campisano teach *enabling entering the bankcard data and self-selecting the CPIN for each of the bankcards of the customer in the payment card system* (see at least *col. 3, ll. 7-26, 45-66*). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the payment card system of Rose et al. to include a card member selecting a PIN as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the payment card system of Rose et al. in this way since allows a customer to select multiple PINs, each of which would correspond to a different credit card and provide the PIN corresponding to the card the customer wishes to charge the purchase on (see at least col. 4, ll. 6-10 of Campisano).

9. Claims 109-110, 114, 123 are rejected under 35 U.S.C. 102(b)/103(a) as being unpatentable over Rose et al. (US 5770843).

**Claim 109 –**

As per claim 109, Rose disclose *a* payment card system and that protects private data of a customer from theft and misuse from merchant computer systems in customer to merchant payment transactions having the limitations of:

- *a payment card with a substrate; (see at least col. 1, ll. 66-67 of Rose)*
- *a customer identifier that is without customer identity data, the customer identifier maps to the payment card system; (see at least col. 2, ll. 14-22)*
- *the customer identifier is encoded to be an encoded customer identifier when, the customer identifier is encoded with an algorithm in the payment card system and then embeds a reference code that references the algorithm; (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*
- *the substrate encoded with the encoded customer identifier (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*
- *the substrate printed with an alias name selected by the customer. (see at least col. 2, ll. 1-3, 24-27 of Rose)*

The Examiner notes that Rose does not specifically state “algorithm in the payment card system."

However, Rose does disclose:

> The card bears a machine readable code, which is transmitted to a database at a remote location. The database locates a record associated with the code, which contains one or more account numbers. (see Abstract)
>
> The code contained within the magnetic stripe is actually a set of signals. This set of signals when delivered to the card reader and hence to database management software cause the software to fetch the account

> numbers and PINs which are associated with the code. (see col. 4, ll. 26-31)
>
> Thus, the code acts as a key to unlock and release the account numbers and the PINs. In principle, the code is no different than a key which unlocks a strongbox which contains the database in a paper format. (see col. 4, ll. 32-36)
>
> Further, the code should not be viewed as or confused with numbers or other alphanumeric characters. The code contained in the magnetic strip is a physical entity which includes physical actions when acted upon by a physical device such as a card reader. (see col. 4, ll. 37-41)
>
> Representing the code as a string of numbers merely presents the code in human-understandable form, which is necessary for a human to read the code because a human cannot directly read the signals on the magnetic stripe. (see col. 4, ll. 42-44)
>
> "Software" much exists in a form which is readable by a microprocessor, and readable at speeds at which the microprocessor operates. (see col. 4, ll. 56-58)

Even though Rose does not explicitly state "algorithm", Rose teaches a code contained in the magnetic stripe that is transmitted to the remote database management software, causing the software to fetch account numbers and PINs which are associated with the code. One of ordinary skill in the art would have been motivated to include the embedded code, remote database with associated software since the associated code and software fetch account numbers and PINs which are associated with that code embedded in the magnetic stripe of the card.

**Claim 110 –**

Rose teach the system of claim 109 as described above. Rose et al. further disclose *a system* having the limitations of:

- *the encoding medium is a magnetic strip. (see at least col. 2, ll. 10-14 of Rose et al.)*

**Claim 114 –**

As per claim 114, Rose disclose *a* method of conducting a payment transaction that protects the privacy of customer identity and bankcard data, from theft and misuse from merchant computer systems having the limitations of:

- *enabling creating a customer identifier that is without customer identity data, the customer identifier maps to a payment card system; (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*
- *encoding the customer identifier with an algorithm, and then embedding a reference code that references the algorithm in the payment card system, thus getting an encoded customer identifier; (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*
- *delivering to a customer, a payment card with a substrate printed with an alias name selected by the* customer and encoded with the encoded customer identifier. *(see at least col. 2, ll. 1-3, 24-27 of Rose et al.)*

The Examiner notes that Rose does not specifically state “algorithm in the payment card system."

However, Rose does disclose:

> The card bears a machine readable code, which is transmitted to a database at a remote location. The database locates a record associated with the code, which contains one or more account numbers. (see Abstract)

> The code contained within the magnetic stripe is actually a set of signals. This set of signals when delivered to the card reader and thence to database management software cause the software to fetch the account numbers and PINs which are associated with the code. (see col. 4, ll. 26-31)
>
> Thus, the code acts as a key to unlock and release the account numbers and the PINs. In principle, the code is no different than a key which unlocks a strongbox which contains the database in a paper format. (see col. 4, ll. 32-36)
>
> Further, the code should not be viewed as or confused with numbers or other alphanumeric characters. The code contained in the magnetic strip is a physical entity which includes physical actions when acted upon by a physical device such as a card reader. (see col. 4, ll. 37-41)
>
> Representing the code as a string of numbers merely presents the code in human-understandable form, which is necessary for a human to read the code because a human cannot directly read the signals on the magnetic stripe. (see col. 4, ll. 42-44)
>
> "Software" mush exist in a form which is readable by a microprocessor, and readable at speeds at which the microprocessor operates. (see col. 4, ll. 56-58)

Even though Rose does not explicitly state "algorithm", Rose teaches a code contained in the magnetic stripe that is transmitted to the remote database management software, causing the software to fetch account numbers and PINs which are associated with the code. One of ordinary skill in the art would have been motivated to include the

embedded code, remote database with associated software since the associated code and software fetch account numbers and PINs which are associated with that code embedded in the magnetic stripe of the card.

**Claim 123 –**

As per claim 123, Rose disclose *a payment security system that provides identity security in use of bankcards, from merchant computer systems,* having the limitations of:

- *a customer identifier that is without customer identity data; (see at least col. 2, ll. 14-16 of Rose et al.)*
- *the customer identifier maps to a plurality of bankcard data of the customer, each bankcard data identified with a card specific personal identification number (CPIN) in the payment security system; (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*
- *the customer identifier is encoded to be an encoded customer identifier when encoded with an algorithm from a list of such algorithms in a database maintained by the payment security system and then embeds a reference code that references the algorithm, the encoded customer identifier is then encoded on a payment card encoding mechanism, wherein the payment card and the CPIN is used by the customer at a merchant point of sale (POS) of a merchant system for conducting a payment transaction. (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*

The Examiner notes that Rose does not specifically state “algorithm in the payment card system."

However, Rose does disclose:

> The card bears a machine readable code, which is transmitted to a database at a remote location. The database locates a record associated

> with the code, which contains one or more account numbers. (see Abstract)
>
> The code contained within the magnetic stripe is actually a set of signals. This set of signals when delivered to the card reader and thence to database management software cause the software to fetch the account numbers and PINs which are associated with the code. (see col. 4, ll. 26-31)
>
> Thus, the code acts as a key to unlock and release the account numbers and the PINs. In principle, the code is no different than a key which unlocks a strongbox which contains the database in a paper format. (see col. 4, ll. 32-36)
>
> Further, the code should not be viewed as or confused with numbers or other alphanumeric characters. The code contained in the magnetic strip is a physical entity which includes physical actions when acted upon by a physical device such as a card reader. (see col. 4, ll. 37-41)
>
> Representing the code as a string of numbers merely presents the code in human-understandable form, which is necessary for a human to read the code because a human cannot directly read the signals on the magnetic stripe. (see col. 4, ll. 42-44)
>
> "Software" mush exist in a form which is readable by a microprocessor, and readable at speeds at which the microprocessor operates. (see col. 4, ll. 56-58)

Even though Rose does not explicitly state "algorithm", Rose teaches a code contained in the magnetic stripe that is transmitted to the remote database management software,

causing the software to fetch account numbers and PINs which are associated with the code. One of ordinary skill in the art would have been motivated to include the embedded code, remote database with associated software since the associated code and software fetch account numbers and PINs which are associated with that code embedded in the magnetic stripe of the card.

10. Claim 112, 115-116 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rose et al. (US 5770843) in view of Campisano.

**Claim 112 –**

Rose teach the system of claim 109 as described above. Rose et al. further disclose *a system* having the limitations of:

- *the encoded customer identifier from the payment card used for a payment transaction at a merchant point of sale (POS), along with entry of a bankcard specific personal identification number (CPIN) by the customer; (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*
- *the payment card system decodes the encoded customer identifier using the algorithm referenced by the code present in the encoded customer identifier,. (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*

Rose does not explicitly disclose:

- *are routed from the POS to an adapted prior art merchant gateway, the adaptation in the prior art merchant gateway routes the encoded customer identifier and the CPIN to the payment card system*
- *the payment card system then maps the customer identifier and the CPIN to retrieve a specific bankcard data and returns the specific bankcard data to the adapted prior art merchant gateway*

Rose in view of Campisano teach *are routed from the POS to an adapted prior art merchant gateway, the adaptation in the prior art merchant gateway routes the encoded customer identifier and the CPIN to the payment card system; the payment card system then maps the customer identifier and the CPIN to retrieve a specific bankcard data and returns the specific bankcard data to the adapted prior art merchant gateway* (see at least col. 3, l. 26 through col. 4, l. 61 of Rose; *see at least Fig. 1, col. 2, ll. 31-37;* col. 2, l. 66 through col. 3, l. 10 of Campisano). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include a verification process and subsequent charging of the credit card as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the verification process is similar to that used to verify original credit card numbers and expiration dates and once the number has been verified, the merchant processes the transaction and the credit card is charged, completing the transaction (see at least col. 2, l. 66 through col. 3, l. 10 of Campisano).

**Claim 115 –**

Rose teach the bankcard of claim 114 as described above. Rose et al. further disclose *a bankcard* having the limitations of:

- *enabling using the payment card for the payment transaction at a merchant point of sale (POS) and entering a bankcard specific personal identification number (CPIN) by the customer; (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*

Rose does not explicitly disclose:

- *enabling the POS routing a payment transaction record to an adapted prior art merchant gateway;*
- *enabling identifying the use of the payment card at the POS by the adapted prior art merchant gateway, and routing the encoded customer identifier and the CPIN of the payment transaction to the payment card system.*

Rose in view of Campisano teach *enabling the POS routing a payment transaction record to an adapted prior art merchant gateway; enabling identifying the use of the payment card at the POS by the adapted prior art merchant gateway, and routing the encoded customer identifier and the CPIN of the payment transaction to the payment card system* (see at least col. 3, l. 26 through col. 4, l. 61 of Rose; *see at least Fig. 1, col. 2, ll. 31-37;* col. 2, l. 66 through col. 3, l. 10 of Campisano). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include a verification process and subsequent charging of the credit card as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the verification process is similar to that used to verify original credit card numbers and expiration dates and once the number has been verified, the merchant processes the transaction and the credit card is charged, completing the transaction (see at least col. 2, l. 66 through col. 3, l. 10 of Campisano).

**Claim 116 –**

Rose in view of Campisano teach the bankcard of claim 115 as described above. Rose et al. further disclose *a bankcard* having the limitations of:

- *decoding the encoded customer identifier by the payment card system using the algorithm that is referenced by the code in the encoded customer identifier, and using the customer identifier and the CPIN, retrieving specific bankcard data in the payment card system and returning to the adapted prior art merchant gateway. (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*

11. Claim 111 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rose et al. (US 5770843) as applied to claim 109 above, further in view of Campisano.

**Claim 111 –**

Rose teach the bankcard of claim 109 as described above. Rose et al. does not explicitly disclose:

- *the customer-identifier is self-created by the customer.*

Campisano teach *the customer-identifier is self-created by the customer* (see at least col. 3, ll. 63-66). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the payment card system of Rose et al. to include a card member selecting a PIN as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the payment card system of Rose et al. in this way since allows a customer to select multiple PINs, each of which would correspond to a different credit card and provide the PIN corresponding to the card the customer wishes to charge the purchase on (see at least col. 4, ll. 6-10 of Campisano).

12. Claims 113 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rose et al. (US 5770843) as applied to claims 109, 112 further in view of Campisano and Low et al.

**Claim 113 –**

Rose teach the system of claim 112 as described above. Rose does not explicitly disclose:

- *the adapted prior art merchant gateway, after receiving the specific bank card data from the payment system, assembles a payment transaction record using the specific bankcard data for submission of the payment transaction record to a bankcard authorization network,*
- *thereby the payment card system operating with the payment card system does not transfer customer identity data to the merchant computer systems.*

Rose in view of Campisano teach *the adapted prior art merchant gateway, after receiving the specific bank card data from the payment system, assembles a payment transaction record using the specific bankcard data for submission of the payment transaction record to a bankcard authorization network* (see at least col. 3, l. 26 through col. 4, l. 61 of Rose; *see at least Fig. 1, col. 2, ll. 31-37;* col. 2, l. 66 through col. 3, l. 10 of Campisano). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include a verification process and subsequent charging of the credit card as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the verification process is similar to that used to verify original credit card numbers and expiration dates and once the number has been verified, the merchant processes the transaction and the credit card is charged, completing the transaction (see at least col. 2, l. 66 through col. 3, l. 10 of Campisano).

Low et al. teach *thereby the payment card system operating with the payment card system does not transfer customer identity data to the merchant computer systems* (see at least col. 3, ll. 9-11; 18-20, 21-29, 33-37). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include bank Bp which knows the customer only by the pseudonym P and transfers funds from account Bp to the stores account Bs as taught by Low et al. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the protocols ensure the anonymity is maintained even if parties other than the purchaser collude with each other to obtain information about the customer (see at least col. 2, ll. 13-17 of Low et al.).

13. Claim 117 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rose et al. (US 5770843) as applied to claims 114-116 above further in view of Low et al.

**Claim 117 –**

Rose in view of Campisano teach the bankcard of claim 116 as described above. Rose does not explicitly disclose:

- *enabling the adapted prior art merchant gateway, after receiving the specific bankcard data from the adapted prior art merchant gateway, to assemble a payment transaction record with the specific bankcard data for submitting the payment transaction record to a bankcard authorization network,*
- *wherein the payment card system does not transfer customer identity data to the merchant computer systems.*

Rose in view of Campisano teach *enabling the adapted prior art merchant gateway, after receiving the specific bankcard data from the adapted prior art merchant gateway, to assemble a payment transaction record with the specific bankcard data for submitting the payment transaction record to a bankcard authorization network* (see at least col. 3, l. 26 through col. 4, l. 61 of Rose; *see at least Fig. 1, col. 2, ll. 31-37;* col. 2, l. 66 through col. 3, l. 10 of Campisano). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include a verification process and subsequent charging of the credit card as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the verification process is similar to that used to verify original credit card numbers and expiration dates and once the number has been verified, the merchant processes the transaction and the credit card is charged, completing the transaction (see at least col. 2, l. 66 through col. 3, l. 10 of Campisano).

Low et al. teach *wherein the payment card system does not transfer customer identity data to the merchant computer systems* (see at least col. 3, ll. 9-11; 18-20, 21-29, 33-37). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include bank Bp which knows the customer only by the pseudonym P and transfers funds from account Bp to the stores account Bs as taught by Low et al. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the protocols ensure the anonymity is maintained even if parties other than the purchaser collude with each other to obtain information about the customer (see at least col. 2, ll. 13-17 of Low et al.).

14. Claims 118-120 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rose et al. (US 5770843) as applied to claims 114 above further in view of Albert et al. (US 5870722) and Duyck (US 5557087).

**Claim 118 –**

Rose teach the bankcard of claim 114 as described above. Rose further disclose:

- *enabling using the payment card for the payment transaction at a merchant point of sale (POS) and enabling entering a bankcard specific personal identification number (CPIN) by the customer; (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*
- *connecting by the merchant POS to the payment card system for routing a payment transaction record that includes …, …, the encoded customer identifier, and the CPIN. (see at least* col. 3, ll. 46-53, col. 4, ll. 15-61 *of Rose)*

Rose does not explicitly disclose:

- *connecting wirelessly by the merchant POS to the payment card system payment transaction record that includes a payment amount,*
- *merchant identifier, reference number*

Albert et al. teach *connecting wirelessly by the merchant POS to the payment card system payment transaction record that includes a payment amount* (see at least col. 5, l. 37 through col. 6, l. 24, Fig. 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose et al. to include wireless financial transactions as taught by Albert et al. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose et al. in this way since it provides a method of settlement batch processing which may be used when a conventional financial transaction processing point-of-sale terminal is used with a wireless transmission system (see at least col. 10, ll. 8-12 of Albert et al.)

Duyck teach *the payment transaction data that includes a merchant identifier, reference number, a payment amount* (see at least Figs. 2-3 and col. 3, ll. 33-52; col. 4, l. 3 (34, ask for 1 or 2 reference #'s, see Fig. 2)). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include payment amount, merchant ID, reference numbers as taught by Duyck. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since it allows for merchants to share a device rather than use their own dedicated device (see at least Abstract) and since the unique merchant code links the transaction to a particular merchant (see at least col. 3, ll. 33-52 of Duyck).

**Claim 119 –**

Rose teach the bankcard of claim 118 as described above. Albert further disclose:

- *receiving wirelessly the payment transaction record by the payment card system.*

Albert et al. teach *receiving wirelessly the payment transaction record by the payment card system* (see at least col. 5, l. 37 through col. 6, l. 24, Fig. 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose et al. in view of Campisano to include wireless financial transactions as taught by Albert et al. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose et al. in view of Campisano in this way since it provides a method of settlement batch processing which may be used when a conventional financial transaction processing point-of-sale terminal is used with a wireless transmission system (see at least col. 10, ll. 8-12 of Albert et al.).

**Claim 120 –**

Rose in view of Albert et al. (US 5870722) and Duyck teach the bankcard of claim 119 as described above. Rose further disclose:

- *decoding the encoded customer identifier by the payment card system using the algorithm that is referenced by the code in the encoded customer identifier, and using the customer identifier and the CPIN, retrieving specific bankcard data in the payment card system. (see at least* col. 3, l. 26 through col. 4, l. 61 *of Rose)*

15. Claim 121 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rose et al. (US 5770843) as applied to claims 114 above further in view of Albert et al. (US 5870722) and Duyck (US 5557087) as applied to claims 118-120 above, further in view of Campisano, and Gillin et al. (US 7254557).

**Claim 121 –**

Rose in view of Albert et al. (US 5870722) and Duyck teach the bankcard of claim 120 as described above. Rose does not explicitly disclose:

- *assembling a payment transaction record with the specific bankcard data, the payment transaction record includes a customer name, a bankcard number, an expiration date, the merchant identifier, the payment amount, and the reference number, and*

- *submitting the payment transaction record to a card authorization network via an adapted prior art merchant gateway.*

Rose in view of Campisano teach *submitting the payment transaction record to a card authorization network via an adapted prior art merchant gateway* (see at least col. 3, l. 26 through col. 4, l. 61 of Rose; *see at least Fig. 1, col. 2, ll. 31-37;* col. 2, l. 66 through col. 3, l. 10 of Campisano). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include a verification process and subsequent charging of the credit card as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the verification process is similar to that used to verify original credit card numbers and expiration dates and once the number has been verified, the merchant processes the transaction and the credit card is charged, completing the transaction (see at least col. 2, l. 66 through col. 3, l. 10 of Campisano).

Duyck teach *the payment transaction data that includes a merchant identifier and payment amount, the reference number* (see at least Figs. 2-3 and col. 3, ll. 33-52; col. 4, l. 3 (34, ask for 1 or 2 reference #'s, see Fig. 2)). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose in view of Campisano to include transaction amount and unique merchant code as taught by Duyck. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in view of Campisano in this way since the unique merchant code links the transaction to a particular merchant (see at least col. 3, ll. 33-52 of Duyck).

Gillin et al. teach *a customer name, a bankcard number, an expiration date* (see at least col. 14, ll. 15-18). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include a database that correlates anonymous information for individual financial services cards with active individual accounts in one table and a second table that correlates identifying information for a given account such as actual name, payment information, like credit card number and expiration date as taught by Gillin et al. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since allows for correlation of anonymous financial card information with actual financial card information (see at least col. 14, ll. 11-18 of Gillin et al.).

16. Claim 122 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rose et al. (US 5770843) as applied to claims 114 above further in view of Albert et al. (US 5870722) and Duyck (US 5557087) as applied to claims 118-120 above, further in view of Campisano, and Gillin et al. (US 7254557) as applied to claim 121 above, further in view of Low et al.

**Claim 122 –**

Rose in view of Albert et al. (US 5870722) and Duyck, Campisano, and Gillin et al. teach the bankcard of claim 120 as described above. Rose does not explicitly disclose:

- *receiving a payment approval record by the payment card system from the card authorization network via the adapted prior art merchant gateway, the payment approval record, that includes the reference number, the payment amount and a payment authorization number, and*
- *forwarding wirelessly the payment approval record to the merchant POS,*
- *wherein the payment card system does not transfer customer identity and bankcard data to the merchant computer systems.*

Rose in view of Campisano teach *receiving a payment approval record by the payment card system from the card authorization network via the adapted prior art merchant gateway, the payment approval record includes the reference number, the payment amount and a payment authorization number* (see at least col. 3, l. 26 through col. 4, l. 61 of Rose; *see at least Fig. 1, col. 2, ll. 31-37;* col. 2, l. 66 through col. 3, l. 10 of Campisano). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include a verification process and subsequent charging of the credit card as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the verification process is similar to that used to verify original credit card numbers and expiration dates and once the number has been verified, the merchant processes the transaction and the credit card is charged, completing the transaction (see at least col. 2, l. 66 through col. 3, l. 10 of Campisano).

Albert et al. teach *forwarding wirelessly the payment approval record to the merchant POS* (see at least col. 5, l. 37 through col. 6, l. 24, Fig. 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose et al. in view of Campisano to include wireless financial transactions as taught by Albert et al. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose et al. in view of Campisano in this way since it provides a method of settlement batch processing which may be used when a conventional financial transaction processing point-of-sale terminal is used with a wireless transmission system (see at least col. 10, ll. 8-12 of Albert et al.).

Low et al. teach *wherein the payment card system does not transfer customer identity and bankcard data to the merchant computer systems* (see at least col. 3, ll. 9-11; 18-20, 21-29, 33-37). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include bank Bp which knows the customer only by the pseudonym P and transfers funds from account Bp to the stores account Bs as taught by Low et al. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the protocols ensure the anonymity is maintained even if parties other than the purchaser collude with each other to obtain information about the customer (see at least col. 2, ll. 13-17 of Low et al.).

17. Claim 124 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rose et al. (US 5770843) as applied to claim 123 above, further in view of Campisano and Low et al.

**Claim 124 –**

Rose teach the payment security system of claim 123 as described above. Rose does not explicitly disclose:

- *on swiping of the payment card and entry of the CPIN, the payment security system receives from the merchant POS, the encoded customer identifier and the CPIN, decodes the encoded customer identifier using the customer identifier and the CPIN selects the specific bankcard data of the customer for processing the payment transaction with a bankcard processing network,*
- *wherein the security system does not transfer the customer and customer bankcard data to the merchant system.*

Rose in view of Campisano teach *on swiping of the payment card and entry of the CPIN, the payment security system receives from the merchant POS, the encoded customer identifier and the CPIN, decodes the encoded customer identifier using the customer identifier and the CPIN selects the specific bankcard data of the customer for processing the payment transaction with a bankcard processing network* (see at least col. 3, l. 26 through col. 4, l. 61 of Rose; *see at least Fig. 1, col. 2, ll. 31-37;* col. 2, l. 66 through col. 3, l. 10 of Campisano). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include a verification process and subsequent charging of the credit card as taught by Campisano. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the verification process is similar to that used to verify original credit card numbers and expiration dates and once the number has been verified, the merchant processes the transaction and the credit card is charged, completing the transaction (see at least col. 2, l. 66 through col. 3, l. 10 of Campisano).

Low et al. teach *wherein the security system does not transfer the customer and customer bankcard data to the merchant system* (see at least col. 3, ll. 9-11; 18-20, 21-29, 33-37). It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Rose to include bank Bp which knows the customer only by the pseudonym P and transfers funds from account Bp to the stores account Bs as taught by Low et al. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Rose in this way since the protocols ensure the anonymity is maintained even if parties other than the purchaser collude with each other to obtain information about the customer (see at least col. 2, ll. 13-17 of Low et al.).

***Response to Arguments***

18. Applicant's arguments with respect to claims 106-108 have been considered but are moot in view of the new ground(s) of rejection and are not persuasive for at least the following reasons:

1. The Examiner has pointed out particular references contained in the prior art of record within the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply.

2. Examiner would like to point out that the Supreme Court in *KSR International Co. v. Teleflex Inc.* described seven rationales to support rejections under 35 U.S.C. 103:

- Combining prior art elements according to known methods to yield predictable results;
- Simple substitution of one known element for another to obtain predictable results;
- Use of known technique to improve similar devices (methods, or products) in the same way;
- Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;
- "Obvious to try" –choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;
- Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art; and
- Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

3. Prior art is not limited just to the references being applied, but includes the understanding of one of ordinary skill in the art. The prior art reference (or references when combined) need not teach or suggest all the claim limitations; however, Office personnel must explain why the difference(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art. The "mere existence of differences between the prior art and an invention does not establish the invention's nonobviousness." see Dann v. Johnson, 425 U.S. 219, 230 (1976).

4. With regard to Rose the Examiner respectfully points out col. 3, l. 26 through col. 4, l. 61 which is directed to ADDITIONAL CONSIDERATIONS. Rose teaches the following:

> "Ordinarily, when a customer makes a credit card purchase at a retail establishment, the establishment request confirmation of validity of the credit card from the issuer of the credit card. In doing so, the establishment is required to identify itself, by providing its "store number," whereupon the establishment is given a transaction number, which is used to identify the purchase."
>
> "In one form of the invention, a conclusion is reached as to the identity of the customer. That is when the customer provides a PIN which matches that associated with an account number stored in the database, the customer is deemed to be an authentic owner of that account. The conclusion can be either expressly acknowledged, as by a cashier stating, "Mr. Wilcox, your identity has been verified," or tacitly acknowledged, by proceeding with the transaction, under the assumption that the customer is actually Mr. Wilcox."
>
> "The code contained within the magnetic stripe is actually a set of signals. This set of signals, when delivered to the card reader in FIG. 5B, and hence to database management software in FIG. 4, cause the software to fetch the account numbers and PINs, shown in FIG. 5D, which are associated with the code."
>
> "Thus the code acts as a key to unlock and release the account numbers and PINs. In principle, the code is no different than a key

> which unlocks a strongbox which contains the database in a paper format."

5. With regard to Campisano the Examiner respectfully points out col. 2, l. 66 through col. 3, l. 10, col. 4, ll. 6-10, 22-25, which is teaches the following:

> "The verification process is similar to that used to verify original credit card numbers and expiration dates. Once the number has been verified, the merchant processes the transaction and the credit card is charged in step 32. After the credit card has been charged, the transaction is complete."
>
> "A current card member is a person that already has a credit card account with the credit card company and is merely calling to activate their alias and select a PIN."
>
> "Consumers who have a plurality of credit cards have the option of selecting multiple PINs, each of which would correspond to a different credit card. When making a purchase, the cardholder need only provide the PIN corresponding to the card he or she wishes to charge the purchase on."
>
> "If the ***cardmember decides to destroy the plastic card*** and rely solely on the Cardless Payment System then the chances of the card being lost or stolen are practically zero." Thus, Campisano recognizes that an actual card can exist.
>
> "A single cardmemeber may have multiple PINs representing different credit cards. It would be possible to assign one PIN to their Visa card and another PIN to their Mastercard, both on the same phone number."

6. Based on the above comments with respect to Rose and Campisano the Examiner disagrees with Applicants assessment of the references alone and in combination. Both references teach a "plastic card" with an "alias" and PINs for different financial accounts associated with that alias. As presented above, Rose teaches an alternative which include using the card at a merchant site with a cashier in which the customer swipes his/her card and enters a PIN. Rose also teaches that the

magnetic strip is embedded with a code which does not directly correspond to any account number of a credit account held by the owner and that the codes acts to unlock and release account numbers and the PINs in the database management software. Applicant states that Campisano does not authorize a transaction. The Examiner respectfully disagree with the assessment, as pointed out above Campisano teaches -

> "The verification process is similar to that used to verify original credit card numbers and expiration dates. Once the number has been verified, the merchant processes the transaction and the credit card is charged in step 32. After the credit card has been charged, the transaction is complete."

and therefore teaches completing a transaction.

7. It is also respectfully point out that Low teaches the protocols ensure the anonymity is maintained even if parties other than the purchaser collude with each other to obtain information about the customer (see at least col. 2, ll. 13-17 of Low et al.). Therefore Applicant's arguments with respect to Low are also not persuasive.

8. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Examiner has addressed issues raised by Applicant above with respect to Rose and Campisano.

9. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413, 208

USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

10. The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See Ex parte Obiaya, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

***Conclusion***

1. Appcliants is also directed to Brody et al. (US 2001/0029485) which is a system and method enabling anonymous credit transaction. The whole reference is relevant.

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARAH M. MONFELDT whose telephone number is (571)270-1833. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm (EST) ALT Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdi can be reached on (571)272-6702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sarah M. Monfeldt/
Patent Examiner, AU 3684
571-270-1833

/Kambiz Abdi/
Supervisory Patent Examiner,
Art Unit 3684